

ELECTRICAL SPECIFICATIONS

1. ALL ELECTRICAL WORKS SHALL COMPLY WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE WITH THE RULES AND REGULATION OF THE OF THE NATIONAL AND LOCAL AUTHORITIES CONCERN IN THE ENFORCEMENT OF THE ELECTRICAL LAWS AND REGULATIONS OF THE UTILITY COMPANIES CONCERN.

2. SERVICE ENTRANCE VOLTAGE TO THE BUILDING SHALL BE 240VOLTS, 60 HERTZ, THREE PHASE.

3. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOACTION OF CONCRETE TERMINAL POLE FOR CONNECTION TO THE POWER SUPPLY AND TELEPHONE.

4. ALL INSTALLATION CONCEALED FROM VIEW WIRING SHALL BE INCASE OF POLYVINYL CHLORIDE (PVC) SCHEDULE 40 EXCEPT POWER AND TELEPHONE SERVICE WHICH SHALL BE RIGID STEEL CONDUIT (RSC) OR OTHER WISE NOTED.

5. PULL BOXES OF APPROPRIATE SIZE SHALL BE PROVIDED, EVEN IF NOT INDICATED IN THE DRAWING TO ACCOMMODATE THE NUMBER OF SPLICES OF WIRE.

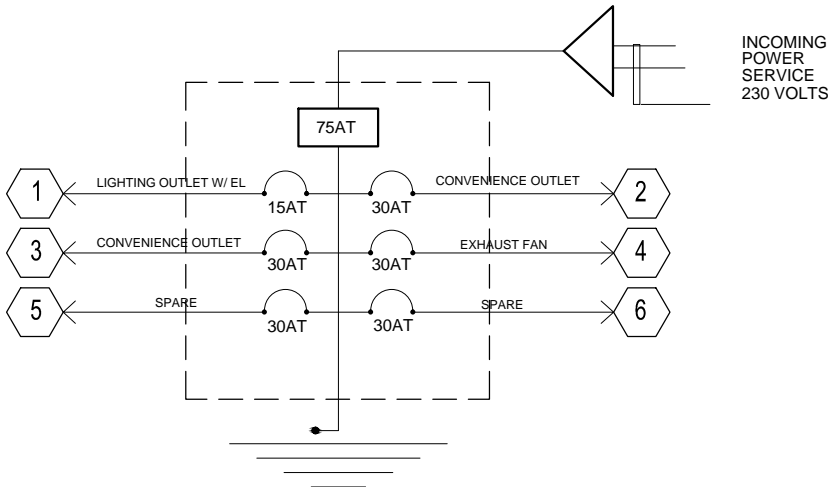
6. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED TYPE APPROPRIATE FOR BOTH LOCATION AND INTENDED USE.

7. ELECTRICAL INSTALLATION SHALL BE UNDER DIRECT SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.

8.NO REVISION IN THE DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNER AND THE OWNER, ANY SUCH REVISIONS DONE WITHOUT APPROVAL SHALL BE CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASE THE WHOLE.

9. MOUNTING SHALL BE AS FOLLOWS:

- LIGHTING SWICHES SHALL BE 1.40 METERS ABOVE FINISH FLOOR LINE.
- CONVENIENCE OUTLETS SHALL BE 0.30 METERS ABOVE FINISH FLOOR LINE.
- TABLE OUTLETS SHALL BE 0.15 METERS ABOVE COUNTER ON THE CENTER.
- CABINET PANELBOARD SHALL BE 1.40 METER ABOVEFLOOR FINISH UNLESS OTHERWISE DIRECTED.



RISER DIAGRAM
SCALE: NTS

| PANEL BOARD | | | | | | | | | | | | | |
|-----------------------|--------------------------|--|--|---------|-----------|-------|------|-----------------|----|-----------------|------|-----------------|------|
| CKT NO. | LOADS DESCRIPTION | NO. OF OUTLETS | TOTAL VA | AMP/CKT | AMP/PHASE | | | CKT. PROTECTION | | SIZE IF WIRE | | SIZE OF CONDUIT | |
| | | | | | AB | BC | CA | AT | AF | mm ² | TYPE | mm ² | TYPE |
| 1 | Lighting Outlet w/ EL | 10 | 1000 | 4.35 | 4.35 | | | 15 | 50 | 3-2.0 | THHN | 20 | EMT |
| 2 | Convenience Outlet | 3 | 300 | 1.30 | | | 1.30 | 15 | 50 | 3-3.5 | THHN | 25 | EMT |
| 3 | Convenience Outlet (SPO) | 3 | 1080 | 4.70 | 4.70 | 4.70 | 4.70 | 20 | 50 | 3-3.5 | THHN | 25 | EMT |
| 4 | Exhaust Fan | 1 | 1492 | 6.49 | | 6.49 | 6.49 | 30 | 50 | 3-3.5 | THHN | 25 | EMT |
| 5 | Spare | | 1440 | 6.26 | 6.26 | 6.26 | 6.26 | 30 | 50 | 3-3.5 | THHN | 25 | EMT |
| 6 | Spare | | 1440 | 6.26 | 6.26 | 6.26 | 6.26 | 30 | 50 | 3-3.5 | THHN | 25 | EMT |
| TOTAL | | | 29.36 | 21.57 | 23.71 | 25.01 | | | | | | | |
| | | | | | | | | | | | | | |
| Line Current | | = | (1.73) x | 25.01 | | | | | | | | | |
| | | = | 43.27 | | | | | | | | | | |
| For Feeder Conductor | | = | 1.25 x | = | 54.09 A | | | | | | | | |
| | | Use 3 - 8.0 mm ² THHN cu. wire in 25 mm PVC pipe with 2.00 mm ² grounding wire | | | | | | | | | | | |
| For Feeder Protection | | = | Use 70AT, 100AF, 3 Phase 230V, 60 Hz, MCCB Bolt on Type in Nema enclosure (gauge 18) w/ grouding busbar & w/ push lock key (all industrial type) | | | | | | | | | | |

LOAD COMPUTATION
SCALE: NTS



R.A. 9266 - Art. 3, Section 20
DRAWINGS AND SPECIFICATIONS DULY SIGNED, STAMPED OR SEALED, AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTIES AND DOCUMENTS OF THE ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON, WITHOUT THE CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS, TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPRODUCTION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE.

PROJECT TITLE:

CROP BIOTECH CENTER POWER HOUSE
LOCATION: PHILRICE-CES, SCIENCE CITY OF MUNOZ, NUEVA ECUA

PRODUCED BY:

PHYSICAL PLANT DIVISION
INFRASTRUCTURE UNIT
PHILRICE
SCIENCE CITY OF MUNOZ, NUEVA ECUA

DESIGNED:

NOTED:

AR. RENATO B. BAJIT
PPD DIVISION HEAD
PHILRICE - CES

END USER:

RECOMMENDING APPROVAL:

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DED FOR ASF
PHILRICE- CES

APPROVED:

Dr. JOHN C. DE LEON
PHILRICE EXECUTIVE DIRECTOR

DESIGN BY : RBB

DATE: NOV2020

CADD BY: MG

DATE:

CHECKED BY:

SHEET NUMBER

E2

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